WHAT IS CLAIMED IS:

1. An information erase method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, wherein

a portion of bitstream information included in the stream object is allowed to be erased in unit of the third data unit.

2. An erase range designation method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and ~~streamer~~ information that manages the stream information, wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes start time information of the first data unit including contents of the cell, and end time information of the first data unit including the contents of the cell, and

an erase range of a portion of bitstream

information included in the stream object is designated by the start time information and the end time information.

3. A temporary erase state setting method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, wherein

a portion of bitstream information included in the stream object is allowed to be set in a temporary erase state in unit of the third data unit.

4. A temporary erase range designation method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes temporary erase start time information of the first data unit including contents of the cell, and temporary

erase end time information of the first data unit including the contents of the cell, and

a temporary erase range for a portion of bitstream information included in the bitstream object is designated by the temporary erase start time information and the temporary erase end time information.

5. An information management method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes start time information of the first data unit including contents of the cell, temporary erase start time information of the first data unit including the contents of the cell, and temporary erase end time information of the first data unit including the contents of the cell, and

a temporary erase range for a portion of bitstream information included in the bitstream object is designated by the temporary erase start time information and the temporary erase end time information.

6. An information management method according to claim 5, wherein

when the start time information matches a head of the first data unit that starts within the third data unit, the streamer information is rewritten by adjusting the temporary erase start time information to the start time information of the first one of the first data units which starts within the third data unit that includes the first data unit with the start time information.

7. An information management method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included

in the streamer information,

the information of the program chain includes start time information of the first data unit including contents of the cell, temporary erase start time information of the first data unit including the contents of the cell, and temporary erase end time information of the first data unit including the contents of the cell,

a temporary erase range for a portion of bitstream information included in the bitstream object is designated by the temporary erase start time information and the temporary erase end time information, and

when the cell corresponding to a portion designated as the temporary erase range includes a head of the stream object, the streamer information is rewritten by adjusting the temporary erase start time information to the start time information of the first one of the first data units which starts within the third data unit that includes the first data unit with the start time information.

8. An information management method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information,

wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes start time information of the first data unit including contents of the cell, temporary erase start time information of the first data unit including the contents of the cell, and temporary erase end time information of the first data unit including the contents of the cell,

a temporary erase range for a portion of bitstream information included in the bitstream object is designated by the temporary erase start time information and the temporary erase end time information, and

the streamer information is rewritten by adjusting the temporary erase start time information to the start time information of the first one of the first data units which starts within another third data unit immediately followed by the third data unit that includes the first data unit with the start time information.

9. An information management method that handles

bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, wherein

the bitstream information includes information of a program consisting of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes start time information of the first data unit including contents of the cell, temporary erase start time information of the first data unit including the contents of the cell, and temporary erase end time information of the first data unit including the contents of the cell,

a temporary erase range for a portion of bitstream information included in the bitstream object is designated by the temporary erase start time information and the temporary erase end time information, and

the streamer information is rewritten by adjusting the temporary erase end time information to the start time information of the first one of the first data

units which starts within the third data unit that includes the first data unit which immediately follows the cell corresponding to the portion designated as the temporary erase range.

10. An information management method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, wherein

the streamer information includes management information of the stream object, and

when a head portion of the stream object is deleted, the third data unit located at a head of the stream object after deletion remains unchanged, and only contents of the management information corresponding to the deleted portion are changed in correspondence with the deletion.

11. A playback sequence setting method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, wherein

the bitstream information includes information of

a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the streamer information includes information of the program chain,

the information of the program chain includes start time information of the first data unit including contents of the cell, and

when a boundary between a plurality of neighboring third data units does not temporally correspond to the start time information, one or more of the first data units within a range from a head position of the third data unit including the first data unit indicated by the start time information to a position indicated by the start time information is/are excluded from a playback sequence of the program chain.

12. A bitstream information encode method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, said bitstream information encode method comprising:

appending a time stamp to each of one or more packet data formed of the first data unit;

segmenting a sequence of one or more packet data with the time stamp in unit of the third data unit; and

inserting a header, including information that pertains to the packet data, in a first one of the second data units within the third data unit.

13. A method of recording bitstream information encoded by the method of claim 12 on an information medium.

14. A bitstream information encode method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, said bitstream information encode method comprising:

appending a time stamp to each of one or more packet data formed of the first data unit;

segmenting a sequence of one or more packet data with the time stamp in unit of the third data unit; and

adding an end code to a data end side in the third data unit, and adding, if necessary, a padding area to the data end side.

15. A bitstream information encode method according to claim 14, further comprising:

splitting contents of the data sequence segmented in unit of the third data unit at the second data unit;

defining the first data unit stuffed or filled with information essentially having no contents as the padding area when the padding area is present at the end in the third data unit and has a size larger than a

size of the second data unit; and

inserting a header, including information that pertains to the packet data, in a first one of the second data units within the third data unit.

16. A method of recording bitstream information encoded by the method of claim 14 on an information medium.

17. A bitstream information decode method that handles bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, wherein

from bitstream information encoded by: appending a time stamp to each of one or more packet data formed of the first data units; segmenting a sequence of one or more packet data with the time stamp in unit of the third data unit; adding an end code and, if necessary, a padding area to a data end side in the third data unit; splitting contents of the data sequence segmented in unit of the third data unit at the second data unit; defining the first data unit stuffed or filled with information essentially having no contents as the padding area when the padding area is present at the end in the third data unit and has a size larger than a size of the second data unit; and inserting a header, including information that pertains to the packet data, in a first one of the second data units within the

third data unit,

the padding area and the header are erased, and the time stamps are also erased to convert the bitstream information into a data sequence consisting of the packet data only.

18. A method of reading out a data sequence, decoded by the method of claim 17, from an information medium on which the bitstream information encoded by the method cited in claim 17 is recorded, and playing back information contents included in the data sequence.

19. An information medium on which the bitstream information encoded by the method of claim 14 is recorded.

20. An information medium for ~~recording bit~~stream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, said information medium having a configuration wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes start time information of the first data unit including contents of the cell, and end time information of the first data unit including the contents of the cell, and

an erase range of a portion of bitstream information included in the stream object is designated by the start time information and the end time information.

21. An information medium for recording bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, said information medium having a configuration wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes temporary erase start time information of the first data unit including contents of the cell, and temporary erase end time information of the first data unit including the contents of the cell, and

a temporary erase range for a portion of bitstream

information included in the bitstream object is designated by the temporary erase start time information and the temporary erase end time information.

22. An information medium for recording bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, said information medium having a configuration wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes start time information of the first data unit including contents of the cell, temporary erase start time information of the first data unit including the contents of the cell, and temporary erase end time information of the first data unit including the contents of the cell,

a temporary erase range for a portion of bitstream information included in the bitstream object is designated by the temporary erase start time

information and the temporary erase end time information, and

when the start time information matches a head of the first data unit that starts within the third data unit, the streamer information is rewritten by adjusting the temporary erase start time information to the start time information of the first one of the first data units which starts within the third data unit that includes the first data unit with the start time information.

23. An information medium for recording bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, said information medium having a configuration wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes start time information of the first data unit including contents of the cell, temporary erase start time information of the first data unit including the

contents of the cell, and temporary erase end time information of the first data unit including the contents of the cell,

a temporary erase range for a portion of bitstream information included in the bitstream object is designated by the temporary erase start time information and the temporary erase end time information, and

when the cell corresponding to a portion designated as the temporary erase range includes a head of the stream object, the streamer information is rewritten by adjusting the temporary erase start time information to the start time information of the first one of the first data units which starts within the third data unit that includes the first data unit with the start time information.

24. An information medium for recording bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, said information medium having a configuration wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes start time information of the first data unit including contents of the cell, temporary erase start time information of the first data unit including the contents of the cell, and temporary erase end time information of the first data unit including the contents of the cell,

a temporary erase range for a portion of bitstream information included in the bitstream object is designated by the temporary erase start time information and the temporary erase end time information, and

the streamer information is rewritten by adjusting the temporary erase start time information to the start time information of the first one of the first data units which starts within another third data unit immediately followed by the third data unit that includes the first data unit with the start time information.

25. An information medium for recording bitstream information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, said information medium

having a configuration wherein

the bitstream information includes information of a program formed of one or more cells, and information of a program chain indicating a sequence of the program or a portion thereof,

the information of the program chain is included in the streamer information,

the information of the program chain includes start time information of the first data unit including contents of the cell, temporary erase start time information of the first data unit including the contents of the cell, and temporary erase end time information of the first data unit including the contents of the cell,

a temporary erase range for a portion of bitstream information included in the bitstream object is designated by the temporary erase start time information and the temporary erase end time information, and

the streamer information is rewritten by adjusting the temporary erase end time information to the start time information of the first one of the first data units which starts the third data unit that includes the first data unit which immediately follows the cell corresponding to the portion designated as the temporary erase range.

26. An information medium for recording bitstream

information formed by a stream object which includes a first data unit, a second data unit having one or more first data units, and a third data unit having one or more second data units, and streamer information that manages the stream information, said information medium having a configuration wherein

the streamer information includes management information of the stream object, and

when a head portion of the stream object is deleted, the third data unit located at a head of the stream object after deletion remains unchanged, and only contents of the management information corresponding to the deleted portion are changed in correspondence with the deletion.

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